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Work of the High-level Group for the Modernisation of Official Statistics

Annual report of the High-Level Group for the Modernisation of Official Statistics

Note by the High-level Group

Summary

This document provides a summary of the outcomes achieved by the High Level Group for the Modernisation of Official Statistics (HLG-MOS) in 2017, as well as the planned work for 2018.

HLG-MOS reviewed its vision at a meeting in March 2018. The previous vision (adopted in 2011) emphasised the use of standardised and industrialised processes for the production of statistics. The statistical community has come a long way to realising this goal. To respond to the needs of national statistical offices in a timely and effective manner, HLG-MOS must ensure that it remains adaptive to the changing environment and shifting landscape of challenges and opportunities. The new vision is presented in an addendum to this paper (ECE/CES/2018/12/Add.1).

The Conference of European Statisticians is invited to take note of the outcomes of recent projects in the area of statistical modernization and endorse the new vision of HLG-MOS.

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I. Background

1. The High-level Group for the Modernisation of Official Statistics (HLG-MOS) was created in 2010 by the Conference of European Statisticians (CES). It comprises the heads of thirteen national and international statistical organizations, and has a mandate to reflect on and guide strategic developments in the ways in which official statistics are produced. This document summarises the outcomes achieved by the HLG-MOS in 2017 and outlines the work to be undertaken in 2018.

II. Achievements in 2017

2. At the 2017 June CES Plenary session, the Conference endorsed the models and frameworks developed under HLG-MOS, namely the Generic Statistical Business Process Model (GSBPM), the Generic Statistical Information Model (GSIM), the Common Statistical Production Architecture (CSPA), and the Generic Activity Model for Statistical Organisations (GAMSO). This is an important step as these models are widely used, including outside the UNECE region, and in many cases they constitute a *de facto* standard.

3. The UNECE Executive Committee (EXCOM) met in December 2017. The Committee consists of representatives of UNECE member countries and guides the work of UNECE, including approving the set-up, renewal, discontinuance, terms of reference and work plans of groups under UNECE. At this meeting, EXCOM expressed support for the work of the HLG-MOS and renewed its mandate for the period of 2018 – 2022.

A. Projects in 2017

1. Data Integration

4. Data integration provides the potential to produce more timely and more disaggregated statistics at higher frequencies than traditional approaches alone. However, official statistical organizations are increasingly facing challenges on how to incorporate new data sources in their statistical production processes.

5. The data integration project brought together experts from Canada, Finland, France, Italy, Mexico, the Netherlands, New Zealand and the United Kingdom.

6. The project team carried out a number of experiments of integrating data from different sources in 2016. In 2017, they developed a practical guide for data integration in statistical organisations, which was supplemented by a number of use cases that were gathered through a survey of statistical organisations. The HLG-MOS projects usually have a duration of one year. Due to the importance and complexity of the issue, this project exceptionally continued for two years.

7. The full results of the project, including the Guide, are available on the project wiki (http://www1.unece.org/stat/platform/display/DI).

8. Furthermore, in February 2017, the Bureau made an in-depth review of data integration which was largely based on the materials form the HLG-MOS project. The Bureau expressed strong support to the work in this area. The Bureau underlined the need to promote actively the outcomes of the HLG-MOS project on data integration to maximise the benefit, and to follow-up on the implementation of the Guide developed under the project.

9. As a follow-up to the Bureau in-depth review and the outcomes of the project, HLG-MOS proposes to organise a Workshop on Data Integration in 2019 to promote the

implementation of the Guide, and update its contents and the use cases. The workshop will ensure that the work remains relevant and useful, as well as promote and advance data integration practices.

2. Data Architecture

10. Statistical organizations need to find, acquire and integrate data from both traditional and new types of data sources at an ever increasing pace and under ever stricter budget constraints, while taking care of security and data ownership. They would all benefit from having a reference architecture and guidance for the modernisation of their processes and systems.

11. The project developed the first version of the Common Statistical Data Architecture (CSDA). The purpose of the CSDA is to support statistical organisations in the design, integration, production and dissemination of official statistics. A number of interesting use cases were identified by the project, including the UN Global Platform. The first version of the Data Architecture will be released in January 2018.

12. This project brought together experts from Canada, Colombia, Hungary, Italy, Mexico, the Netherlands, New Zealand, Poland, Serbia, Slovenia and the United Kingdom. The full results of the project are available on the project wiki (http://www1.unece.org/stat/platform/display/DA).

B. Other HLG-MOS outputs

13. In addition to the projects, work is undertaken by virtual task teams and at physical meetings. The outputs from these activities in 2017 included:

(a) Paper on "Innovative organisations: Strategies to stay relevant";

(b) Quality indicators for the GSBPM (for both survey and administrative data);

(c) Hackathon on 'Telling stories with SDG data' and its products;

(d) Logical information model for variables;

(e) Training framework for key statistical skills based on GSBPM.

III. Work programme for 2018

14. Each year a Workshop on the Modernisation of Official Statistics is held in November that reviews the work carried out under the auspices of the HLG-MOS during that year. The workshop also considers proposals for work to be undertaken in the following year. The following sections outline the work programme that was created as a result of the discussions at the workshop on 22-23 November 2017 in Geneva, Switzerland.

A. Projects in 2018

15. In December 2017, HLG MOS approved two new project proposals for 2018 that are outlined below.

16. **Strategic Communications Framework** - The project will focus on enabling NSOs to modernise their communications at the strategic level. It will include the following work packages:

- Work Package 1: Guidelines on the strategic communications development process;

- Work Package 2: Best practices on defining a position in the new communications environment;
- Work Package 3: Guidelines on issue and reputation management.

17. The work undertaken in the work packages will be informed by a sprint held on 12-16 February 2018. The outcome of the project will be reported to HLG-MOS in November 2018 and consequently to the CES Bureau in February 2019.

18. **Data Architecture Phase 2** - The project will focus on providing a more robust version of the Common Statistical Data Architecture that has been validated against use cases, as well as guidance on implementing the architecture. It will include the following work packages:

- Work Package 1: Updated version of Common Statistical Data Architecture;
- Work Package 2: Data Architecture Guidelines

B. Modernisation Groups

19. On 19 December 2017, the Executive Board met to discuss the work programme to be undertaken by the three Modernisation Groups in 2018. The following paragraphs outline the work that is planned to be undertaken by these groups.

1. Capabilities and Communication

20. The Capabilities and Communication Group (chaired by Poland) focuses on the organisational changes necessary to support modernisation in statistical organisations.

21. The group will consider the topics of *organisational resilience* and a *capability development framework in line with GAMSO* during their monthly virtual meetings. In addition to the monthly meeting, a separate task team will progress work on *risk management*.

22. The Capabilities and Communications Group will organise a *Workshop on Human Resources, Management and Training on 12-14 September in Oslo, Norway*.

2. Supporting Standards

23. The Supporting Standards Group (chaired by Italy) provides support for the implementation of the "ModernStats" models (GAMSO, GSBPM, GSIM and CSPA) through a range of activities, which include development, promotion and maintenance of the models.

24. During their monthly virtual meeting, the group will consider the *integrated view of the ModernStats models*. The activity aims to increase understanding on how the models can be implemented individually and collectively and what benefits can be expected.

25. In addition to the monthly meeting, three separate task teams will progress work on the *revision of GSBPM*, the *revision of GSIM* and the development of a *Common semantic model*.

26. In collaboration with the Sharing Tools Group, Supporting Standards Group will organise the *ModernStats World Workshop on 11-13 April, 2018 in Geneva, Switzerland*. The workshop will focus on the implementation of the four models.

3. Sharing Tools

27. The Sharing Tools Group (chaired by New Zealand) provides implementation support for CSPA.

28. The group will consider the update of CSPA 1.5 during their monthly virtual meetings. The group will also discuss compliance and communications issues. In addition to the monthly meeting, separate task teams will progress work on *Architecture Patterns* and *Methodology Architecture*.

4. Innovation stream

29. Currently, a small task team is investigating an application of artificial intelligence called Machine Learning. The team is investigating whether the 'hype' surrounding machine learning in the context of official statistics should be believed or dispelled. The team is currently finalising a position paper on whether machine learning can be used in the process of producing official statistics based on their experiences.

5. Other expert meetings

30. In 2018, the following additional workshops will be held:

- Workshop on Statistical Data Dissemination and Communication, 25-27 June 2018, Cork, Ireland;

  The focus of the workshop will be on cutting edge ideas, new trends, experiments, and approaches in the areas of statistical data dissemination and communication. The following substantive topics will be considered: communications environment, strategic communications, broadening the target audience, and issue management.

- Workshop on Statistical Data Editing, 18–20 September 2018, Neuchatel, Switzerland;
  The workshop aims to progress work on statistical data editing in the context of statistical modernization.

- Workshop on Statistical Data Collection, 10–12 October 2018, Geneva, Switzerland
  The objective of this workshop is to identify innovative ways and best practices in statistical data collection, and to provide a platform for practitioners to exchange experiences and foster collaboration in this area.

IV. Involvement in modernisation activities

31. As the work on modernising official statistics continues to grow and succeed, more national and international statistical organizations are looking for ways to align with the various HLG-MOS initiatives. In 2017, there were over 350 people involved from 37 national and international organisations.

32. There are various ways that statistical organizations can participate:

(a) Join the Statistical Modernisation Community – It is open to all interested statistical organizations that are willing and able to work together on aspects of statistical modernisation, and that publicly endorse a "Statement of Intent". For more information, please see: http://www1.unece.org/stat/platform/display/smc;

(b) Get involved in projects and groups – Membership of the various projects and groups is open to anyone working in official statistics who is prepared to contribute actively to the activities of the project or group;

(c) Follow the outcomes of HLG-MOS activities – Updates and outputs are regularly posted on the HLG-MOS wiki: http://www1.unece.org/stat/platform/display/hlgbas. Information about new products and initiatives is also shared via the LinkedIn group "Modernising Official Statistics".